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Huke et al.

(54) METHOD OF OFFERING A MARKETPLACE OF ODDS FOR WAGERING

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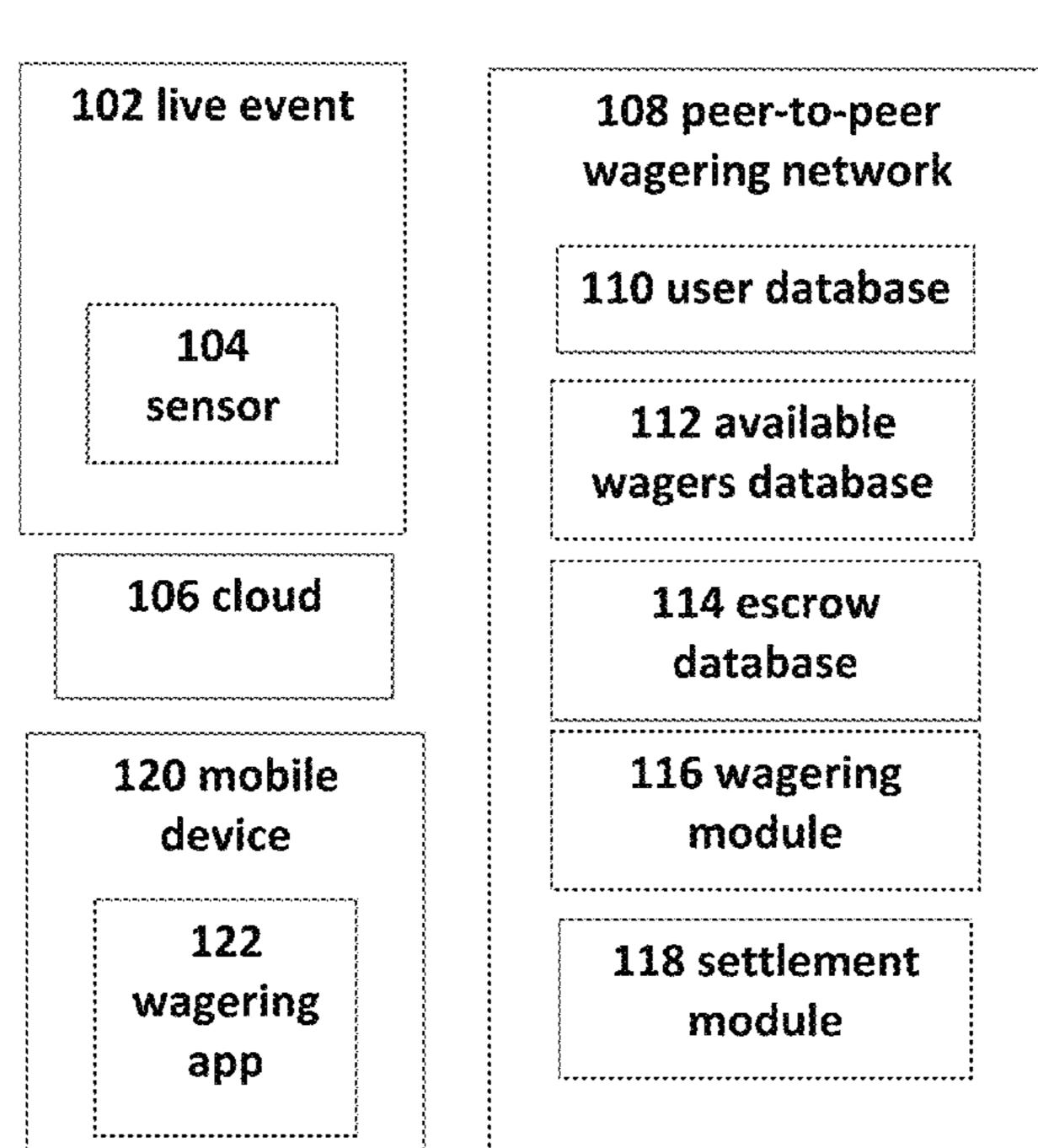
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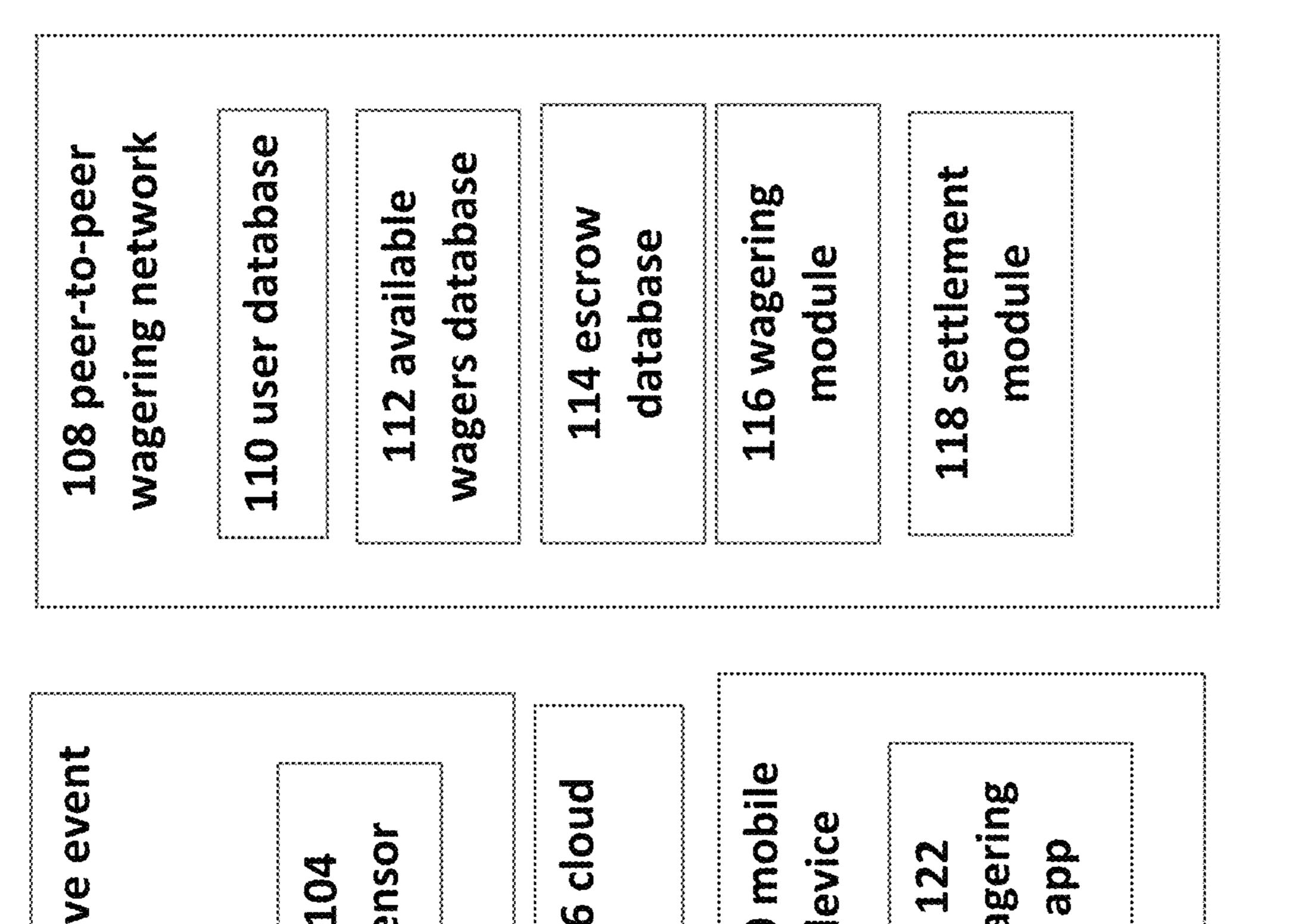
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(57) ABSTRACT

A system for peer-to-peer wagering on outcomes of a live sporting event. Users can select from a set of available wagers and set their own odds and terms, other users can then accept those odds and terms. The system may hold all involved user's money or credit in an escrow account until the actual outcome of the subject of the wager has been determined. Then the system handles the settlement of the wager, either directly or by communicating with a third party.

12 Claims, 4 Drawing Sheets



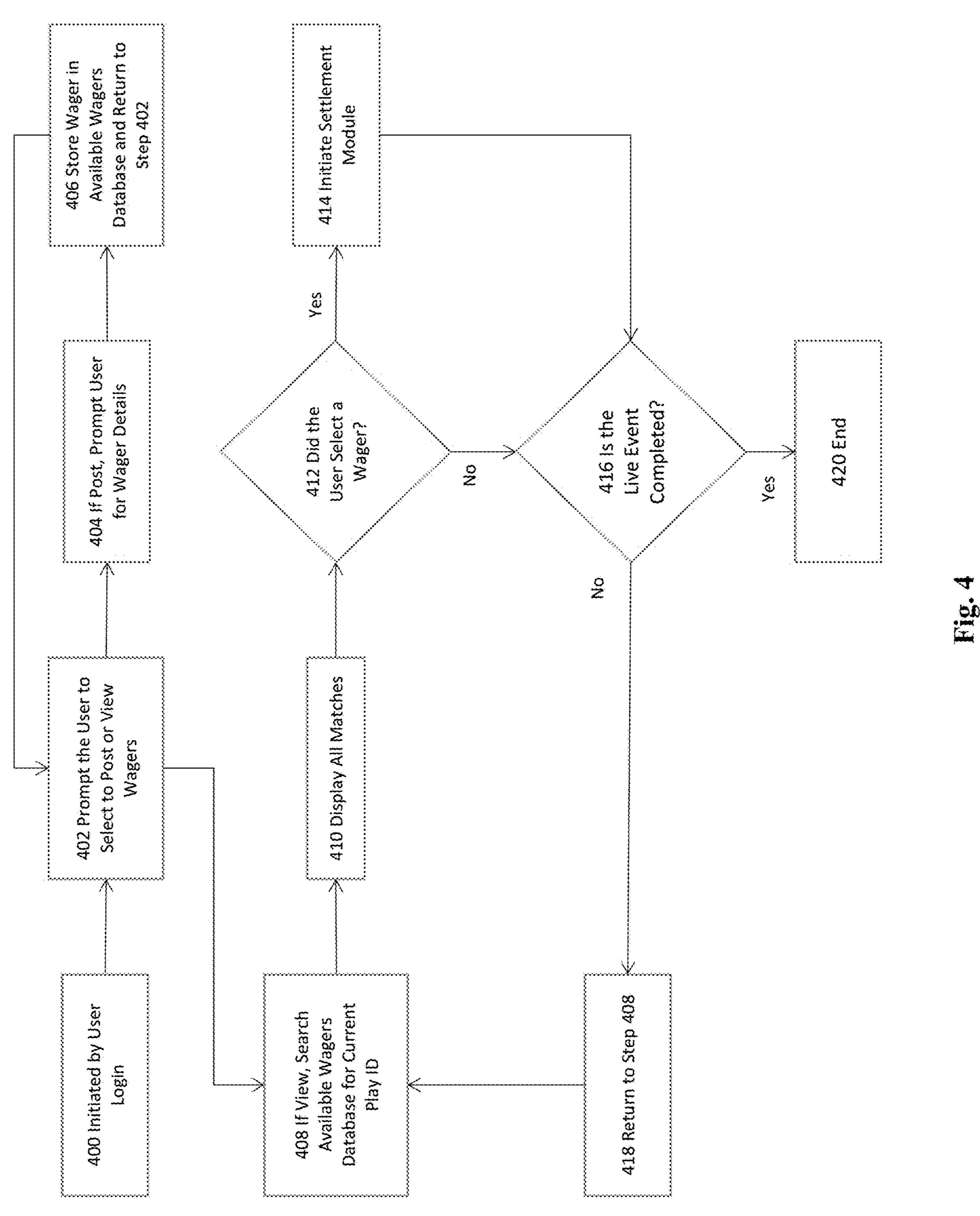


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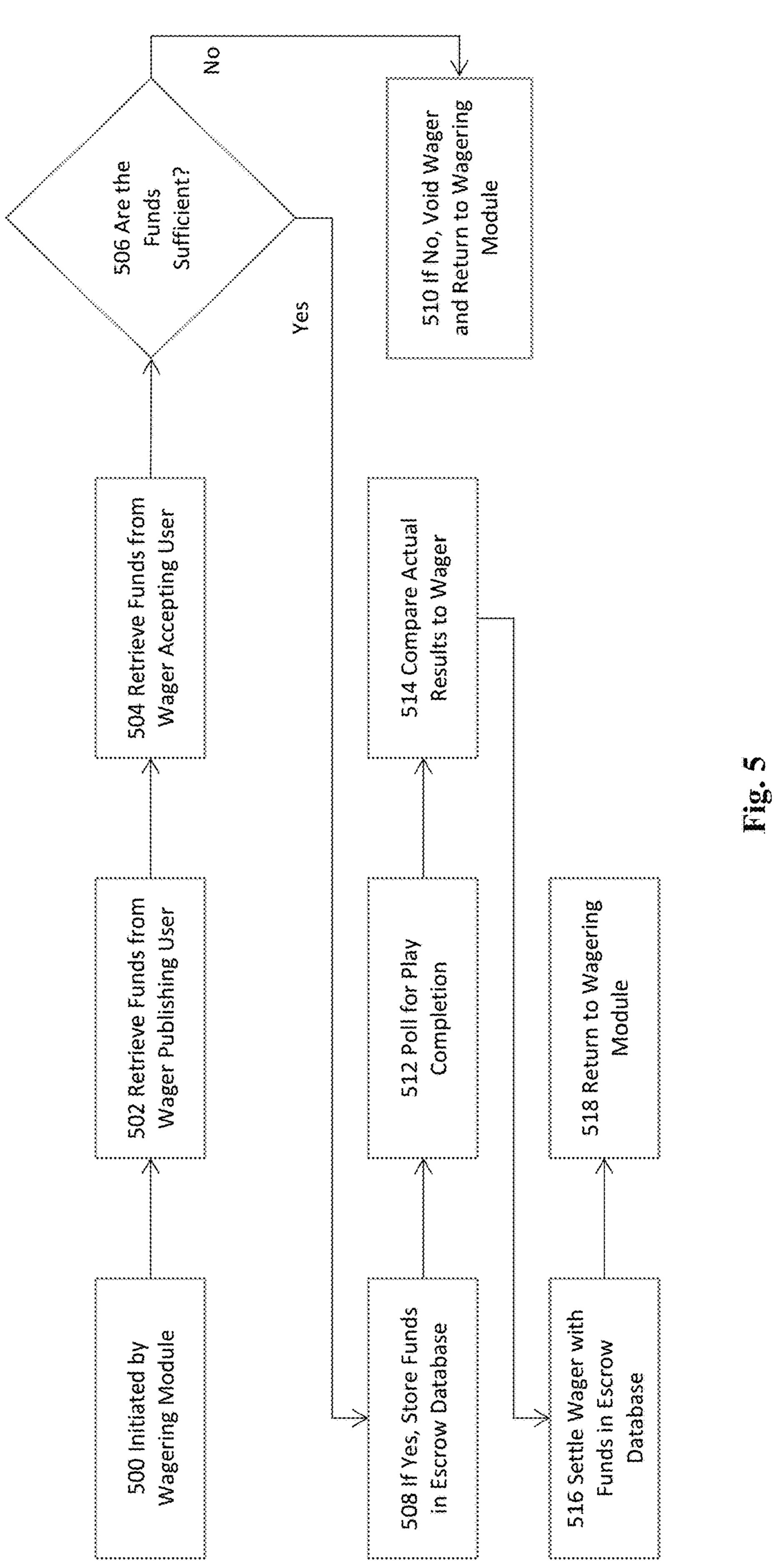
Odds	T:T	1:1.2	1:3		••
WagerOption	Pass	Run	Interception		
User ID	bpatterson	footballguy123	bpatterson		•
Płay ID		₹~ -{	2	j	Ĭ

Fig. 2

UserID	Escrow Amount
bpatterson	\$40
footballguy123	\$
Go_Rams_1969	\$22.50
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US 11,763,636 B2



1

METHOD OF OFFERING A MARKETPLACE OF ODDS FOR WAGERING

FIELD

The embodiments are generally related to play by play wagering on live sporting events focused on individual players.

BACKGROUND

The prevalence of social media has made the capturing of significant or exciting events important to many people. The spread of sports wagering that has accompanied the Supreme Court's ruling on the Professional and Amateur 15 Sports Protection Act is going to create a number of opportunities for exciting wagering experiences. To capture these experiences users currently need to capture the experience in real time, taking time and focus away from both their wagering experience and their experience of the live sporting event they are wagering on. The user may want to capture information from the live event, the wagering platform and their own experience, in order to memorialize the experience. To capture all this data efficiently would require significant resources from the user.

Current sports betting platforms provide numerous different ways to wager on entire sporting events, or individual aspects or portions of those events. Betting on portions of events, or micro-betting, has become more accessible due to advancements in technology. However, as with the emer- 30 gence of any new market that branches off from an existing market, micro-betting comes with new opportunities and problems that betting on an entire sporting event did not have. One problem is that it may be difficult to communicate with others which portion of an event a person successfully 35 wagered on. Especially when there are multiple portions of the event that can be described the same way, for example in football a conversion on 3rd and 10 during the first quarter may describe more than one play. Further, a bettor may have a net gain over the course of an event but may not remember 40 exactly what they wagered on each individual portion of the event that lead to that net gain.

SUMMARY

Embodiments include methods and systems for making and facilitating peer to peer wagering. One embodiment includes a method of providing a marketplace of peer to peer wagers in a play by play wagering system, including receiving data from a live sporting event upon which wagers can 50 be placed on single plays inside of that live event, receiving at least one proposed wager with settlement terms from at least one user, providing the proposed wager to at least one other user, and settling the wager.

Another embodiment includes a method for providing 55 peer to peer wagering in a single play wagering system, including executing on a processor the steps of displaying a wagering game for wagering on single plays in a live event; displaying an option to create a wager on an upcoming play in the live event; displaying one or more terms associated 60 with creating a wager on the upcoming play in the live event; and displaying a created wager on the upcoming play in the live event.

Another embodiment includes a system for providing peer to peer waging on a wagering network, including: a user 65 database containing user identification for one or more users of a single play wagering game; an available wagers data-

2

base containing one or more available wagers for upcoming single plays in a live event; an escrow database; a wagering module; and a settlement module, where the available wagers database is updated by one or more proposed wagers on one or more upcoming single plays in the live event and the one or more proposed wagers are created by the one or more users.

BRIEF DESCRIPTIONS OF THE DRAWINGS

The accompanying drawings illustrate various embodiments of systems, methods, and various other aspects of the embodiments. Any person with ordinary skills in the art will appreciate that the illustrated element boundaries (e.g. boxes, groups of boxes, or other shapes) in the figures represent an example of the boundaries. It may be understood that, in some examples, one element may be designed as multiple elements or that multiple elements may be designed as one element. In some examples, an element shown as an internal component of one element may be implemented as an external component in another, and vice versa. Furthermore, elements may not be drawn to scale. Non-limiting and non-exhaustive descriptions are described with reference to the following drawings. The components 25 in the figures are not necessarily to scale, emphasis instead being placed upon illustrating principles.

FIG. 1 illustrates a player focused wagering system, according to an embodiment.

FIG. 2 illustrates an available wagers database, according to an embodiment.

FIG. 3 illustrates an escrow database, according to an embodiment.

FIG. 4 illustrates a wagering module, according to an embodiment.

FIG. 5 illustrates a settlement module, according to an embodiment.

DETAILED DESCRIPTION

Aspects of the present invention are disclosed in the following description and related figures directed to specific embodiments of the invention. Those of ordinary skill in the art will recognize that alternate embodiments may be devised without departing from the spirit or the scope of the claims. Additionally, well-known elements of exemplary embodiments of the invention will not be described in detail or will be omitted so as not to obscure the relevant details of the invention.

As used herein, the word exemplary means serving as an example, instance or illustration. The embodiments described herein are not limiting, but rather are exemplary only. It should be understood that the described embodiments are not necessarily to be construed as preferred or advantageous over other embodiments. Moreover, the terms embodiments of the invention, embodiments or invention do not require that all embodiments of the invention include the discussed feature, advantage, or mode of operation.

Further, many of the embodiments described herein are described in terms of sequences of actions to be performed by, for example, elements of a computing device. It should be recognized by those skilled in the art that the various sequence of actions described herein can be performed by specific circuits (e.g., application specific integrated circuits (ASICs)) and/or by program instructions executed by at least one processor. Additionally, the sequence of actions described herein can be embodied entirely within any form of computer-readable storage medium such that execution of

the sequence of actions enables the processor to perform the functionality described herein. Thus, the various aspects of the present invention may be embodied in a number of different forms, all of which have been contemplated to be within the scope of the claimed subject matter. In addition, for each of the embodiments described herein, the corresponding form of any such embodiments may be described herein as, for example, a computer configured to perform the described action.

With respect to the embodiments, a summary of terminology used herein is provided.

An action refers to a specific play or specific movement in a sporting event. For example, an action may determine which players were involved during a sporting event. In some embodiments, an action may be a throw, shot, pass, swing, kick, hit, performed by a participant in a sporting event. In some embodiments, an action may be a strategic decision made by a participant in the sporting event such as a player, coach, management, etc. In some embodiments, an 20 action may be a penalty, foul, or type of infraction occurring in a sporting event. In some embodiments, an action may include the participants of the sporting event. In some embodiments, an action may include beginning events of sporting event, for example opening tips, coin flips, opening 25 pitch, national anthem singers, etc. In some embodiments, a sporting event may be football, hockey, basketball, baseball, golf, tennis, soccer, cricket, rugby, MMA, boxing, swimming, skiing, snowboarding, horse racing, car racing, boat racing, cycling, wrestling, Olympic sport, eSports, etc. 30 Actions can be integrated into the embodiments in a variety of manners.

A "bet" or "wager" is to risk something, usually a sum of money, against someone else's or an entity on the basis of or event. It may be understood that non-monetary items may be the subject of a "bet" or "wager" as well, such as points or anything else that can be quantified for a "bet" or "wager". A bettor refers to a person who bets or wagers. A bettor may also be referred to as a user, client, or participant 40 throughout the present invention. A "bet" or "wager" could be made for obtaining or risking a coupon or some enhancements to the sporting event, such as better seats, VIP treatment, etc. A "bet" or "wager" can be done for certain amount or for a future time. A "bet" or "wager" can be done 45 for being able to answer a question correctly. A "bet" or "wager" can be done within a certain period of time. A "bet" or "wager" can be integrated into the embodiments in a variety of manners.

A "book" or "sportsbook" refers to a physical establish- 50 ment that accepts bets on the outcome of sporting events. A "book" or "sportsbook" system enables a human working with a computer to interact, according to set of both implicit and explicit rules, in an electronically powered domain for the purpose of placing bets on the outcome of sporting event. An added game refers to an event not part of the typical menu of wagering offerings, often posted as an accommodation to patrons. A "book" or "sportsbook" can be integrated into the embodiments in a variety of manners.

To "buy points" means a player pays an additional price 60 (more money) to receive a half-point or more in the player's favor on a point spread game. Buying points means you can move a point spread, for example up to two points in your favor. "Buy points" can be integrated into the embodiments in a variety of manners.

The "price" refers to the odds or point spread of an event. To "take the price" means betting the underdog and receiv-

ing its advantage in the point spread. "Price" can be integrated into the embodiments in a variety of manners.

"No action" means a wager in which no money is lost or won, and the original bet amount is refunded. "No action" can be integrated into the embodiments in a variety of manners.

The "sides" are the two teams or individuals participating in an event: the underdog and the favorite. The term "favorite" refers to the team considered most likely to win an event or game. The "chalk" refers to a favorite, usually a heavy favorite. Bettors who like to bet big favorites are referred to "chalk eaters" (often a derogatory term). An event or game in which the sports book has reduced its betting limits, usually because of weather or the uncertain status of injured players is referred to as a "circled game." "Laying the points or price" means betting the favorite by giving up points. The term "dog" or "underdog" refers to the team perceived to be most likely to lose an event or game. A "longshot" also refers to a team perceived to be unlikely to win an event or game. "Sides", "favorite", "chalk", "circled game", "laying the points price", "dog" and "underdog" can be integrated into the embodiments in a variety of manners.

The "money line" refers to the odds expressed in terms of money. With money odds, whenever there is a minus (–) the player "lays" or is "laying" that amount to win (for example \$100); where there is a plus (+) the player wins that amount for every \$100 wagered. A "straight bet" refers to an individual wager on a game or event that will be determined by a point spread or money line. The term "straight-up" means winning the game without any regard to the "point" spread"; a "money-line" bet. "Money line", "straight bet", "straight-up" can be integrated into the embodiments in a variety of manners.

The "line" refers to the current odds or point spread on a the outcome of a future event, such as the results of a game 35 particular event or game. The "point spread" refers to the margin of points in which the favored team must win an event by to "cover the spread." To "cover" means winning by more than the "point spread". A handicap of the "point spread" value is given to the favorite team so bettors can choose sides at equal odds. "Cover the spread" means that a favorite win an event with the handicap considered or the underdog wins with additional points. To "push" refers to when the event or game ends with no winner or loser for wagering purposes, a tie for wagering purposes. A "tie" is a wager in which no money is lost or won because the teams' scores were equal to the number of points in the given "point spread". The "opening line" means the earliest line posted for a particular sporting event or game. The term "pick" or "pick'em" refers to a game when neither team is favored in an event or game. "Line", "cover the spread", "cover", "tie", "pick" and "pick-em" can be integrated into the embodiments in a variety of manners.

> To "middle" means to win both sides of a game; wagering on the "underdog" at one point spread and the favorite at a different point spread and winning both sides. For example, if the player bets the underdog $+4\frac{1}{2}$ and the favorite $-3\frac{1}{2}$ and the favorite wins by 4, the player has middled the book and won both bets. "Middle" can be integrated into the embodiments in a variety of manners.

Digital gaming refers to any type of electronic environment that can be controlled or manipulated by a human user for entertainment purposes. A system that enables a human and a computer to interact according to set of both implicit and explicit rules, in an electronically powered domain for 65 the purpose of recreation or instruction. "eSports" refers to a form of sports competition using video games, or a multiplayer video game played competitively for spectators,

typically by professional gamers. Digital gaming and "eSports" can be integrated into the embodiments in a variety of manners.

The term event refers to a form of play, sport, contest, or game, especially one played according to rules and decided 5 by skill, strength, or luck. In some embodiments, an event may be football, hockey, basketball, baseball, golf, tennis, soccer, cricket, rugby, MMA, boxing, swimming, skiing, snowboarding, horse racing, car racing, boat racing, cycling, wrestling, Olympic sport, etc. Event can be integrated into 10 the embodiments in a variety of manners.

The "total" is the combined number of runs, points or goals scored by both teams during the game, including overtime. The "over" refers to a sports bet in which the player wagers that the combined point total of two teams 15 will be more than a specified total. The "under" refers to bets that the total points scored by two teams will be less than a certain figure. "Total", "over", and "under" can be integrated into the embodiments in a variety of manners.

A "parlay" is a single bet that links together two or more wagers; to win the bet, the player must win all the wagers in the "parlay". If the player loses one wager, the player loses the entire bet. However, if he wins all the wagers in the "parlay", the player wins a higher payoff than if the player had placed the bets separately. A "round robin" is a series of parlays. A "teaser" is a type of parlay in which the point spread, or total of each individual play is adjusted. The price of moving the point spread (teasing) is lower payoff odds on winning wagers. "Parlay", "round robin", "teaser" can be integrated into the embodiments in a variety of manners.

A "prop bet" or "proposition bet" means a bet that focuses on the outcome of events within a given game. Props are often offered on marquee games of great interest. These include Sunday and Monday night pro football games, various high-profile college football games, major college 35 bowl games and playoff and championship games. An example of a prop bet is "Which team will score the first touchdown?" "Prop bet" or "proposition bet" can be integrated into the embodiments in a variety of manners.

A "first-half bet" refers to a bet placed on the score in the 40 first half of the event only and only considers the first half of the game or event. The process in which you go about placing this bet is the same process that you would use to place a full game bet, but as previously mentioned, only the first half is important to a first-half bet type of wager. A 45 "half-time bet" refers to a bet placed on scoring in the second half of a game or event only. "First-half-bet" and "half-time-bet" can be integrated into the embodiments in a variety of manners.

A "futures bet" or "future" refers to the odds that are 50 posted well in advance on the winner of major events, typical future bets are the Pro Football Championship, Collegiate Football Championship, the Pro Basketball Championship, the Collegiate Basketball Championship, and the Pro Baseball Championship. "Futures bet" or 55 "future" can be integrated into the embodiments in a variety of manners.

The "listed pitchers" is specific to a baseball bet placed only if both of the pitchers scheduled to start a game actually start. If they don't, the bet is deemed "no action" and 60 refunded. The "run line" in baseball, refers to a spread used instead of the money line. "Listed pitchers" and "no action" and "run line" can be integrated into the embodiments in a variety of manners.

The term "handle" refers to the total amount of bets taken. 65 The term "hold" refers to the percentage the house wins. The term "juice" refers to the bookmaker's commission, most

6

commonly the 11 to 10 bettors lay on straight point spread wagers: also known as "vigorish" or "vig". The "limit" refers to the maximum amount accepted by the house before the odds and/or point spread are changed. "Off the board" refers to a game in which no bets are being accepted. "Handle", "juice", vigorish", "vig" and "off the board" can be integrated into the embodiments in a variety of manners.

"Casinos" are a public room or building where gambling games are played. "Racino" is a building complex or grounds having a racetrack and gambling facilities for playing slot machines, blackjack, roulette, etc. "Casino" and "Racino" can be integrated into the embodiments in a variety of manners.

Customers are companies, organizations or individual that would deploy, for fees, and may be part of, or perform, various system elements or method steps in the embodiments.

Managed service user interface service is a service that can help customers (1) manage third parties, (2) develop the web, (3) do data analytics, (4) connect thru application program interfaces and (4) track and report on player behaviors. A managed service user interface can be integrated into the embodiments in a variety of manners.

Managed service risk management services is a service that assists customers with (1) very important person management, (2) business intelligence, and (3) reporting. These managed service risk management services can be integrated into the embodiments in a variety of manners.

Managed service compliance service is a service that helps customers manage (1) integrity monitoring, (2) play safety, (3) responsible gambling and (4) customer service assistance. These managed service compliance services can be integrated into the embodiments in a variety of manners.

Managed service pricing and trading service is a service that helps customers with (1) official data feeds, (2) data visualization and (3) land based, on property digital signage. These managed service pricing and trading services can be integrated into the embodiments in a variety of manners.

Managed service and technology platform are services that helps customers with (1) web hosting, (2) IT support and (3) player account platform support. These managed service and technology platform services can be integrated into the embodiments in a variety of manners.

Managed service and marketing support services are services that help customers (1) acquire and retain clients and users, (2) provide for bonusing options and (3) develop press release content generation. These managed service and marketing support services can be integrated into the embodiments in a variety of manners.

Payment processing services are those services that help customers that allow for (1) account auditing and (2) withdrawal processing to meet standards for speed and accuracy. Further, these services can provide for integration of global and local payment methods. These payment processing services can be integrated into the embodiments in a variety of manners.

Engaging promotions allow customers to treat your players to free bets, odds boosts, enhanced access and flexible cashback to boost lifetime value. Engaging promotions can be integrated into the embodiments in a variety of manners.

"Cash out" or "pay out" or "payout" allow customers to make available, on singles bets or accumulated bets with a partial cash out where each operator can control payouts by managing commission and availability at all times. The "cash out" or "pay out" or "payout" can be integrated into the embodiments in a variety of manners, including both

monetary and non-monetary payouts, such as points, prizes, promotional or discount codes, and the like.

"Customized betting" allow customers to have tailored personalized betting experiences with sophisticated tracking and analysis of players' behavior. "Customized betting" can be integrated into the embodiments in a variety of manners.

Kiosks are devices that offer interactions with customers clients and users with a wide range of modular solutions for both retail and online sports gaming. Kiosks can be integrated into the embodiments in a variety of manners.

Business Applications are an integrated suite of tools for customers to manage the everyday activities that drive sales, profit, and growth, by creating and delivering actionable insights on performance to help customers to manage the sports gaming. Business Applications can be integrated into the embodiments in a variety of manners.

State based integration allows for a given sports gambling game to be modified by states in the United States or other countries, based upon the state the player is in, based upon 20 mobile phone or other geolocation identification means. State based integration can be integrated into the embodiments in a variety of manners.

Game Configurator allow for configuration of customer operators to have the opportunity to apply various chosen or 25 newly created business rules on the game as well as to parametrize risk management. Game configurator can be integrated into the embodiments in a variety of manners.

"Fantasy sports connector" are software connectors between method steps or system elements in the embodi- 30 ments that can integrate fantasy sports. Fantasy sports allow a competition in which participants select imaginary teams from among the players in a league and score points according to the actual performance of their players. For example, if a player in a fantasy sports is playing at a given real time 35 sports, odds could be changed in the real time sports for that player.

Software as a service (or SaaS) is a method of software delivery and licensing in which software is accessed online via a subscription, rather than bought and installed on 40 individual computers. Software as a service can be integrated into the embodiments in a variety of manners.

Synchronization of screens means synchronizing bets and results between devices, such as TV and mobile, PC and wearables. Synchronization of screens can be integrated into 45 the embodiments in a variety of manners.

Automatic content recognition (ACR) is an identification technology to recognize content played on a media device or present in a media file. Devices containing ACR support enable users to quickly obtain additional information about 50 the content they see without any user-based input or search efforts. To start the recognition, a short media clip (audio, video, or both) is selected. This clip could be selected from within a media file or recorded by a device. Through algorithms such as fingerprinting, information from the 55 actual perceptual content is taken and compared to a database of reference fingerprints, each reference fingerprint corresponding to a known recorded work. A database may contain metadata about the work and associated information, including complementary media. If the fingerprint of the 60 media clip is matched, the identification software returns the corresponding metadata to the client application. For example, during an in-play sports game a "fumble" could be recognized and at the time stamp of the event, metadata such as "fumble" could be displayed. Automatic content recog- 65 nition (ACR) can be integrated into the embodiments in a variety of manners.

8

Joining social media means connecting an in-play sports game bet or result to a social media connection, such as a FACEBOOK® chat interaction. Joining social media can be integrated into the embodiments in a variety of manners.

Augmented reality means a technology that superimposes a computer-generated image on a user's view of the real world, thus providing a composite view. In an example of this invention, a real time view of the game can be seen and a "bet" which is a computer-generated data point is placed above the player that is bet on. Augmented reality can be integrated into the embodiments in a variety of manners.

Some embodiments of this disclosure, illustrating all its features, will now be discussed in detail. It can be understood that the embodiments are intended to be open ended in that an item or items used in the embodiments is not meant to be an exhaustive listing of such item or items, or meant to be limited to only the listed item or items.

It can be noted that as used herein and in the appended claims, the singular forms "a," "an," and "the" include plural references unless the context clearly dictates otherwise. Although any systems and methods similar or equivalent to those described herein can be used in the practice or testing of embodiments, only some exemplary systems and methods are now described.

FIG. 1 is a system for a player focused wagering system. This system may include a live event 102, for example a sporting event such as a football game, basketball game, baseball game, hockey game, tennis match, golf tournament, eSports or digital game, etc. The live event 102 will include some number of actions or plays, upon which a user, bettor or customer can place a bet or wager, typically through an entity called a sportsbook. There are numerous types of wagers the bettor can make, including, a straight bet, a money line bet, a bet with a point spread or line that bettor's team would need to cover, if the result of the game with the same as the point spread the user would not cover the spread, but instead the tie is called a push. If the user is betting on the favorite, they are giving points to the opposing side, which is the underdog or longshot. Betting on all favorites is referred to as a chalk, this is typically applied to round robin, or other styles of tournaments. There are other types of wagers, including parlays, teasers and prop bets, that are added games, that often allow the user to customize their betting, by changing the odds and payouts they receive on a wager. Certain sportsbooks will allow the bettor to buy points, to move the point spread off of the opening line, this will increase the price of the bet, sometimes by increasing the juice, vig, or hold that the sportsbook takes. Another type of wager the bettor can make is an over/under, in which the user bets over or under a total for the live event, such as the score of American football or the run line in baseball, or a series of action in the live event. Sportsbooks have a number of bets they can handle, a limit of wagers they can take on either side of a bet before they will move the line or odds off of the opening line. Additionally, there are circumstance, such as an injury to an important player such as a listed pitcher, in which a sportsbook, casino or racino will take an available wager off the board. As the line moves there becomes an opportunity for a bettor to bet on both sides at different point spreads in order to middle and win both bets. Sportsbooks will often offer bets on portions of games, such as first half bets and half time bets. Additionally, the sportsbook can offer futures bets on live events 102 in the future. Sportsbooks need to offer payment processing services in order to cash out customers. This can be done at kiosks at the live event or at another location.

Further, embodiments may include a plurality of sensors 104 that may be used such as motion sensors, temperature sensors, humidity sensors, cameras such as an RGB-D camera which is a digital camera capable of capturing color (RGB) and depth information for every pixel in an image, 5 microphones, a radiofrequency receiver, a thermal imager, a radar device, a lidar device, an ultrasound device, a speaker, wearable devices etc. Also, the plurality of sensors 104 may include tracking devices, such as RFID tags, GPS chips or other such devices embedded on uniforms, in equipment, in 10 the field of play, in the boundaries of the field of play, or other markers on the field of play. Imaging devices may also be used as tracking devices such as player tracking that provides statistical information through real-time X, Y positioning of players and X, Y, Z positioning of the ball.

Further, embodiments may include a cloud 106 or communication network that may be a wired and/or a wireless network. The communication network, if wireless, may be implemented using communication techniques such as Visible Light Communication (VLC), Worldwide Interoperabil- 20 ity for Microwave Access (WiMAX), Long Term Evolution (LTE), Wireless Local Area Network (WLAN), Infrared (IR) communication, Public Switched Telephone Network (PSTN), Radio waves, and other communication techniques known in the art. The communication network may allow 25 ubiquitous access to shared pools of configurable system resources and higher-level services that can be rapidly provisioned with minimal management effort, for example over the Internet, and relies on sharing of resources to achieve coherence and economies of scale, like a public 30 utility, while third-party clouds allow organizations to focus on their core businesses instead of expending resources on computer infrastructure and maintenance. The cloud 106 may be communicatively coupled to a peer-to-peer wagering network 108 which may perform real time analysis on the 35 type of play and the result of the play. The cloud 106 may also be synchronized with game situational data, such as the time of the game, the score, location on the field, weather conditions, and the like which may affect the choice of play utilized. For example, in some exemplary embodiments, the 40 cloud may not receive data gathered from sensors 104 and may, instead, receive data from an alternative data feed, such as Sports Radar®. This data may be compiled substantially immediately following the completion of any play and the data from this feed may be compared with a variety of team 45 data and league data based on a variety of elements, including down, possession, score, time, team, and so forth, as described in various exemplary embodiments herein.

Further, embodiments may include the peer-to-peer wagering network 108 which may perform real time analysis 50 on the type of play and the result of a play or action. The peer-to-peer wagering network 108 (or cloud 106) may also be synchronized with game situational data, such as the time of the game, the score, location on the field, weather conditions, and the like which may affect the choice of play 55 utilized. For example, in other exemplary embodiments, peer-to-peer wagering network 108 may not receive data gathered from sensors 104 and may, instead, receive data from an alternative data feed, such as Sports Radar®. This data may be provided substantially immediately following 60 the completion of any play and the data from this feed may be compared with a variety of team data and league data based on a variety of elements, including down, possession, score, time, team, and so forth, as described in various exemplary embodiments herein. The wagering network can 65 offer a number of software as a service managed services such as, user interface service, risk management service,

10

compliance, pricing and trading service, IT support of the technology platform, business applications, game configuration, state based integration, fantasy sports connection, integration to allow the joining of social media, as well as marketing support services that can deliver engaging promotions to the user.

Further, embodiments may include a user database 110 which contains data relevant to all users of the system, which may include, a user ID of the user, a device identifier for a mobile device 120, a list of the players indicated as favorites by the user, and could also include wagering history on the user, and other relevant user data.

Further, embodiments may include an available wager database 112 which stores wagers available for users to select and which are published by other users.

Further, embodiments may include an escrow database 114 which stores transactions being facilitated by the wagering network and will hold the funds until the wager is settled. The escrow database 114 may also store settlement terms for transactions being facilitated either directly between the two users or through a third-party platform.

Further, embodiments may include a wagering module 116 that allows users to propose and accept wager odds and terms, for example, a user may propose 2 to 1 odds that the next play of a football game is a run, then another user or other users may accept the proposing user's odds and terms.

Further, embodiments may include a settlement module 118 which determines if both the proposing user and wagering user have accepted terms, which may include transferring money or credit into the escrow database, then settles the wager based on the actual results of the subject of the wager, for example, the next play of the game.

Further, embodiments may include the mobile device 120 such as a computing device, laptop, smartphone, tablet, computer, smart speaker, or I/O devices. I/O devices may be present in the computing device. Input devices may include keyboards, mice, trackpads, trackballs, touchpads, touch mice, multi-touch touchpads and touch mice, microphones, multi-array microphones, drawing tablets, cameras, singlelens reflex camera (SLR), digital SLR (DSLR), CMOS sensors, accelerometers, infrared optical sensors, pressure sensors, magnetometer sensors, angular rate sensors, depth sensors, proximity sensors, ambient light sensors, gyroscopic sensors, or other sensors. Output devices may include video displays, graphical displays, speakers, headphones, inkjet printers, laser printers, and 3D printers. Devices may include a combination of multiple input or output devices, including, e.g., Microsoft KINECT, Nintendo Wii mote for the WIT, Nintendo WII U GAMEPAD, or Apple IPHONE. Some devices allow gesture recognition inputs through combining some of the inputs and outputs. Some devices allow for facial recognition which may be utilized as an input for different purposes including authentication and other commands. Some devices provides for voice recognition and inputs, including, e.g., Microsoft KINECT, SIRI for IPHONE by Apple, Google Now or Google Voice Search. Additional user devices have both input and output capabilities, including, e.g., haptic feedback devices, touchscreen displays, or multi-touch displays. Touchscreen, multi-touch displays, touchpads, touch mice, or other touch sensing devices may use different technologies to sense touch, including, e.g., capacitive, surface capacitive, projected capacitive touch (PCT), in-cell capacitive, resistive, infrared, waveguide, dispersive signal touch (DST), in-cell optical, surface acoustic wave (SAW), bending wave touch (BWT), or force-based sensing technologies. Some multitouch devices may allow two or more contact points with the

surface, allowing advanced functionality including, e.g., pinch, spread, rotate, scroll, or other gestures. Some touchscreen devices, including, e.g., Microsoft PIXELSENSE or Multi-Touch Collaboration Wall, may have larger surfaces, such as on a table-top or on a wall, and may also interact 5 with other electronic devices. Some I/O devices, display devices or group of devices may be augmented reality devices. The I/O devices may be controlled by an I/O controller. The I/O controller may control one or more I/O devices, such as, e.g., a keyboard and a pointing device, e.g., 10 a mouse or optical pen. Furthermore, an I/O device may also contain storage and/or an installation medium for the computing device. In still other embodiments, the computing device may include USB connections (not shown) to receive handheld USB storage devices. In further embodiments, an 15 I/O device may be a bridge between the system bus and an external communication bus, e.g. a USB bus, a SCSI bus, a FireWire bus, an Ethernet bus, a Gigabit Ethernet bus, a Fiber Channel bus, or a Thunderbolt bus. In some embodiments the mobile device 120 could be an optional compo- 20 nent and would be utilized in a situation in which a paired wearable device is utilizing the mobile device 120 as additional memory or computing power or connection to the internet.

Further, embodiments may include a wagering app 122, 25 which is a program that enables the user to place bets on individual plays in the live event 102, and display the audio and video from the live event 102, along with the available wagers on the mobile device 120. The wagering app 122 allows the user to interact with the peer-to-peer wagering 30 network 108 in order to place bets and provide payment/receive funds based on wager outcomes.

FIG. 2 illustrates the available wagers database 112. The available wager database 112 stores wagers available for users to select which are published by other users. The 35 database contains a play ID corresponding to a play of the live game 102, for example 1, a user ID of the user that created the wager, for example, "bpatterson", the wager option the user would be betting on, for example "pass", and the odds, for example 1:1, in some embodiments the database may also contain terms of the wager, for example, the number of users who can take the wager, the maximum or minimum wager amount, if the publishing user can revoke the wager, etc.

FIG. 3 illustrates the escrow database 114. The escrow 45 database 114 stores transactions being facilitated by the wagering network and will hold the funds until the wager is settled. The escrow database 114 may also store settlement terms for transactions being facilitated either directly between users or through a third-party platform. The escrow 50 database contains at least a user ID, for example, "bpatterson" and an amount in escrow, for example \$40.

FIG. 4 illustrates the wagering module 116. The process begins with the wagering module 116 being, at step 400, initiated by user login via the wagering app 122, login 55 includes at least a user ID, for example user Bob Patterson is watching a baseball game and logs into the wagering app 122 to make wagers with his user ID "bpatterson", in some embodiments login may include security credentials such as a password. The wagering module 116 prompts, at step 402, 60 the user to select either to post or view a wager for the next play of the live game 102, in some embodiments this choice may be facilitated by interactables on a GUI, for example, user Bob Patterson may see two buttons on his mobile device 120 that say "Post a Wager" and "View Wagers". If 65 the user selects to post a wager, the wagering module 116 prompts, at step 404, the user for details of the wager, which

12

include the outcome being wagered on, for example "pass" or "run", and the odds the user is willing to offer other users, for example 1:1, in some embodiments there may also be additional term settings the user may provide, for example, the number of users who can take the wager, the maximum or minimum wager amount, if the publishing user can revoke the wager, etc. The wagering module **116** stores, at step 406, the wager and details of the wager in the available wagers database 112 with a play ID corresponding to the upcoming play. Then the wagering module 116 returns to step 402. If the user selects to view wagers, the wagering module 116 searches, at step 408, the available wagers database 112 for all entries that match the play ID of the upcoming play of the live game 102. The wagering module 116 displays, at step 410, all matching entries in the available wagers database 112. The wagering module 116 determines, at step 412, if the user has selected a wager, for example, user Bob Patterson is sure the next play is going to be a run, looking at all the available wagers, he selects one that has "run" as an option and has the best payout for him based on the odds. If the user has selected a wager, the wagering module 116 initiates, at step 414, the settlement module 118, and sends in the selected wager data. The wagering module 116 determines, at step 416, if the live event 102 has been completed. If the live event 102 is not completed, The wagering module 116 returns, at step 418, to step 408, which will update the displayed matches if any new wagers have been added to the available wagers database 112, in some embodiments there may be a wait period before the wagering module 116 returns to step 408 to reduce the load on the system. If the live event 102 is complete, The wagering module 116 ends, at step 420.

FIG. 5 illustrates the settlement module 116. The process begins with the settlement module 118 being, at step 500, initiated by the wagering module 116 and receiving details about the selected wager from the wagering module 116. The settlement module 118 retrieves, at step 502, funds from the user who created and posted the wager, by prompting the user for payment information, for example, credit card information, and collecting the required amount of funds, in some embodiments the funds may be retrieved from a database which stores user payment information or a prepaid amount of credit or points, in some embodiments the user who created and posted the wager may have to put forward some amount of funds before the wager can be posted. The settlement module 118 retrieves, at step 504, funds from the user who accepted the wager, by prompting the user for payment information, for example, credit card information, and collecting the required amount of funds, in some embodiments the funds may be retrieved from a database which stores user payment information or a prepaid amount of credit or points, in some embodiments the user will also be prompted for the amount they intend to wager at this step. The settlement module 118 determines, at step **506**, if the funds retrieved from both the publishing user and accepting user are sufficient, in some embodiments this may include checking with a third party, for example, the user's credit card company. If both users have sufficient funds, the settlement module 118 stores, at step 508, those funds in the escrow database 114, in some embodiments this step may include making a charge to the users via their method of payment, for example, user Bob Patterson is paying via credit card, at this step his card would be charged and the funds would be stored in escrow until the wager is resolved. If one or both users do not have sufficient funds, the settlement module 118 voids, at step 510, the wager and returns to the wagering module 116. The settlement module

118 polls, at step 512, for completion of the current play of the live event 102. The settlement module 118 compares, at step 514, the actual results of the play of the live event 102 to the user's wager selection. The settlement module 118 uses, at step 516, the funds stored in the escrow database 114 from each user involved in the wager to pay the winning user, in some embodiments this may involve transferring the funds into another database, for example, the user database 110, in another embodiment the users may settle the wager directly and the settlement module will notify at least one user with the results of the wager, in another embodiment the transaction may be handled by a third party in which case the settlement module 118 sends a notification to the third party and may also notify the users. The settlement module 118 returns, at step 518, to the wagering module 116.

The foregoing description and accompanying figures illustrate the principles, preferred embodiments and modes of operation of the invention. However, the invention should not be construed as being limited to the particular embodiments discussed above. Additional variations of the embodiments discussed above will be appreciated by those skilled in the art.

Therefore, the above-described embodiments should be regarded as illustrative rather than restrictive. Accordingly, it should be appreciated that variations to those embodi- 25 ments can be made by those skilled in the art without departing from the scope of the invention as defined by the following claims.

What is claimed is:

1. A method of providing a marketplace of peer to peer wagers in a play by play wagering system, comprising:

receiving data from a live sporting event upon which wagers on single plays inside of the live event are available;

receiving at least one proposed wager with settlement terms from at least one user;

providing the proposed wager to at least one other user; settling the wager; and

delivering a settlement notification associated with the $_{40}$ settling of the proposed wager.

- 2. The method of providing a marketplace of peer to peer wager in a play by play wagering system of claim 1, further comprising prompting the at least one user to propose a wager.
- 3. The method of providing a marketplace of peer to peer wager in a play by play wagering system of claim 1, further comprising inputting, by the at least one user, an outcome of the at least one proposed wager corresponding to an upcoming play in the live event and odds of the at least one 50 proposed wager.
- 4. The method of providing a marketplace of peer to peer wager in a play by play wagering system of claim 1, further

14

comprising storing the at least one proposed wager and making the at least one proposed wager available as a wager.

- 5. The method of providing a marketplace of peer to peer wager in a play by play wagering system of claim 1, further comprising retrieving funds from the at least one user who proposed the at least one proposed wager.
- 6. The method of providing a marketplace of peer to peer wager in a play by play wagering system of claim 1, further comprising retrieving funds from at least one other user who accepts the at least one proposed wager.
- 7. The method of providing a marketplace of peer to peer wager in a play by play wagering system of claim 1, further comprising storing funds associated with the at least one proposed wager in escrow.
- 8. The method of providing a marketplace of peer to peer wager in a play by play wagering system of claim 7, further comprising transmitting the funds from escrow upon a determination of result of the at least one proposed wager.
- 9. A method for providing peer to peer wagering in a single play wagering system, comprising executing on a processor the steps of:

displaying a wagering game for wagering on single plays in a live event;

displaying an option to create a wager on an upcoming play in the live event;

displaying one or more terms associated with creating a wager on the upcoming play in the live event; and

displaying a created wager on the upcoming play in the live event; and

displaying a settlement notification associated with the settling of the created wager.

- 10. The method for providing peer to peer wagering in a single play wagering system of claim 9, further comprising displaying one or more available wagers.
- 11. The method for providing peer to peer wagering in a single play wagering system of claim 9, further comprising displaying a notification that funds were transferred to escrow.
- 12. A system for providing peer to peer waging on a wagering network, comprising:
 - a user database containing user identification for one or more users of a single play wagering game;
 - an available wagers database containing one or more available wagers for upcoming single plays in a live event;

an escrow database;

- a wagering module; and
- a settlement module,

wherein the available wagers database is updated by one or more proposed wagers on one or more upcoming single plays in the live event and the one or more proposed wagers are created by the one or more users.

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